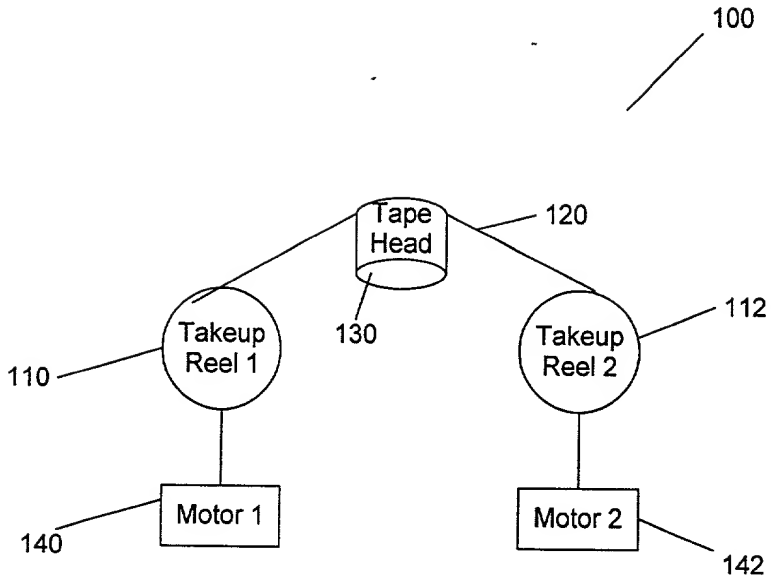
100
Tape Head
120
130
Takeup Reel 1
110
Takeup Reel 2
112
Motor 1
140
Motor 2
142

Fig. 1

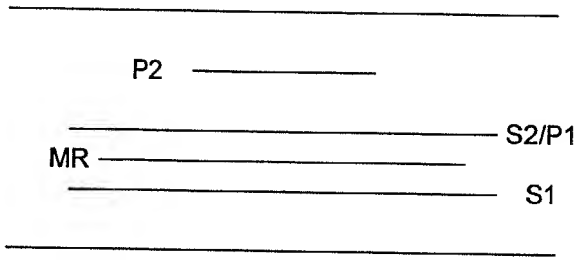

Fig. 2A

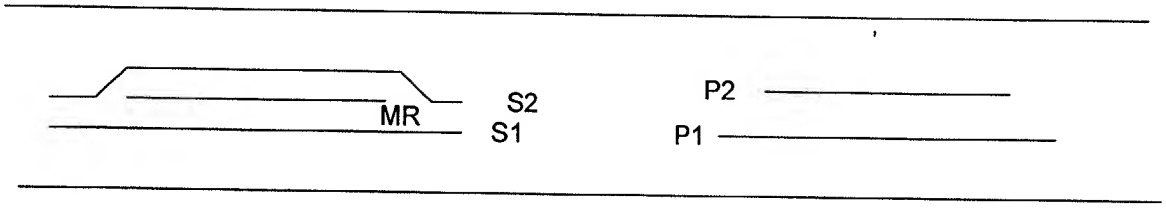

Fig. 2B

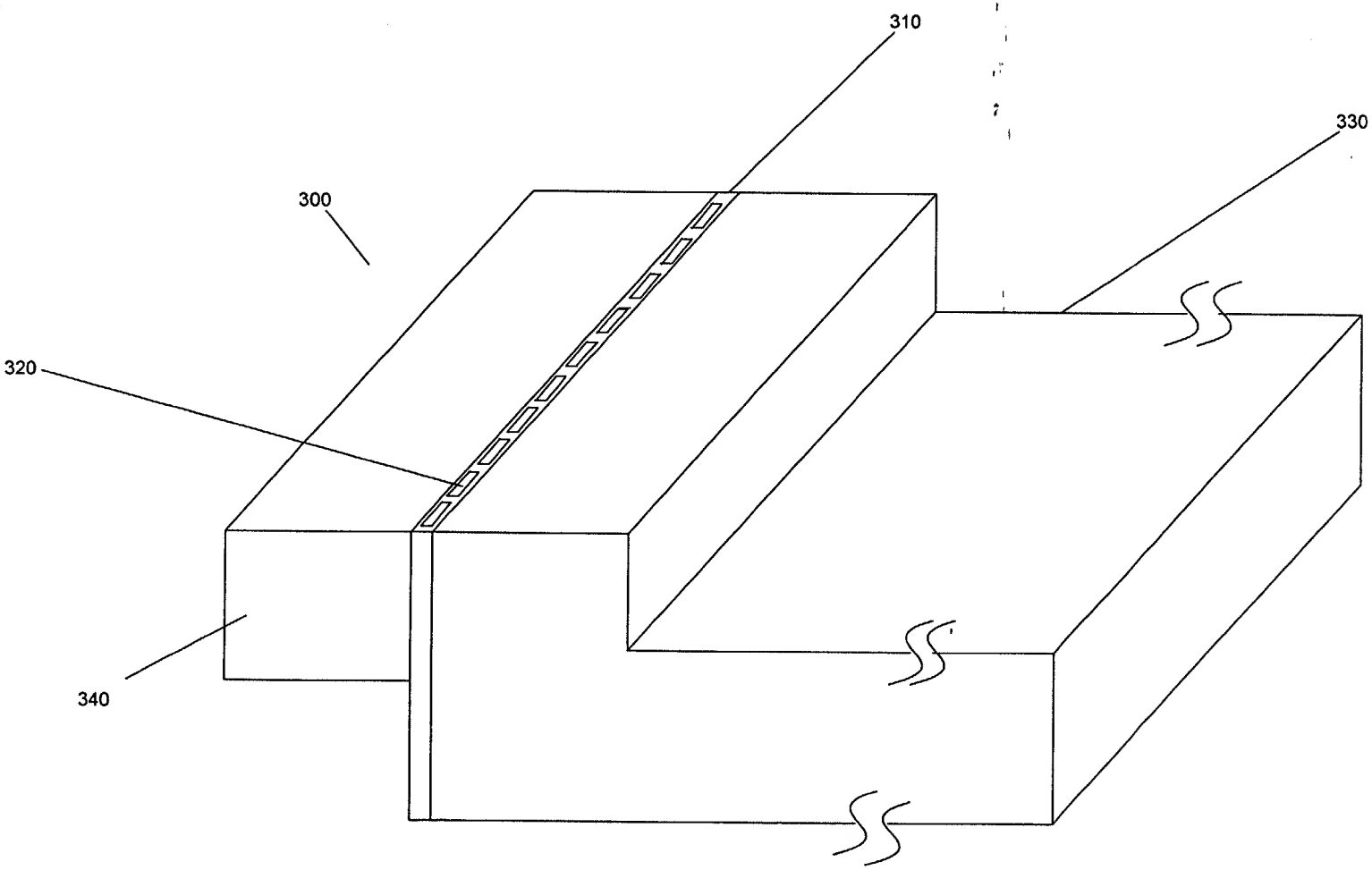

Fig. 3

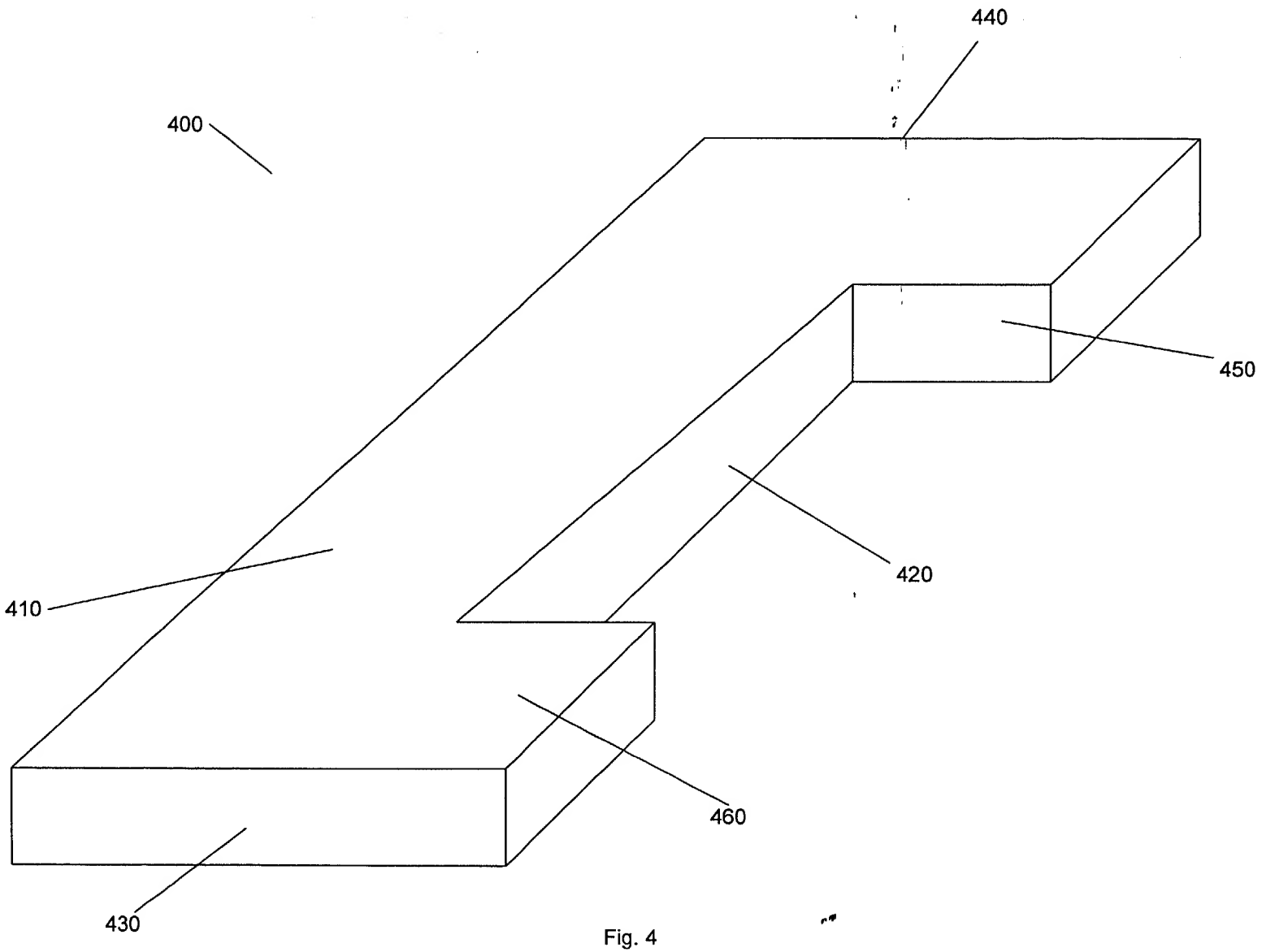

Fig. 4

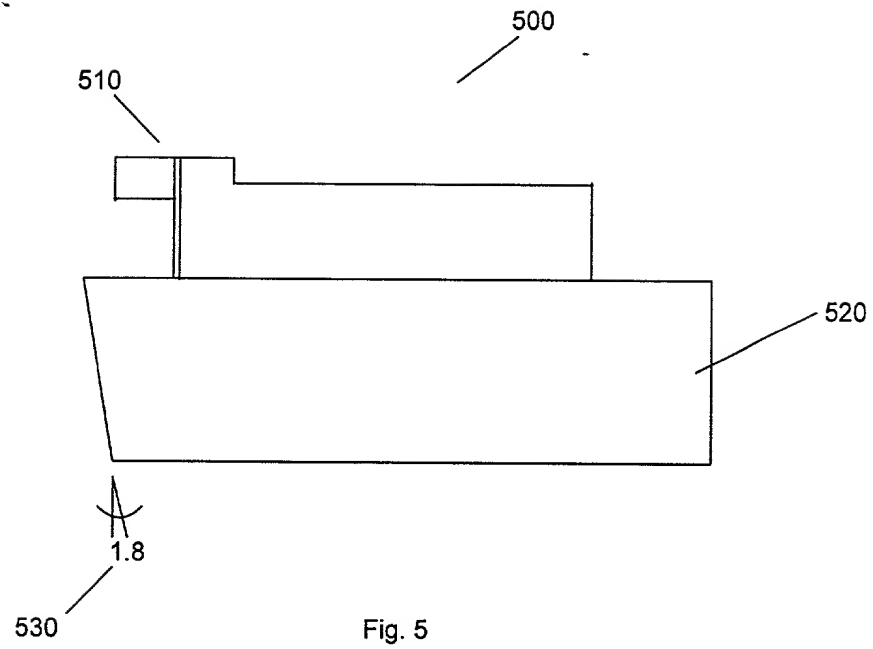

Fig. 5

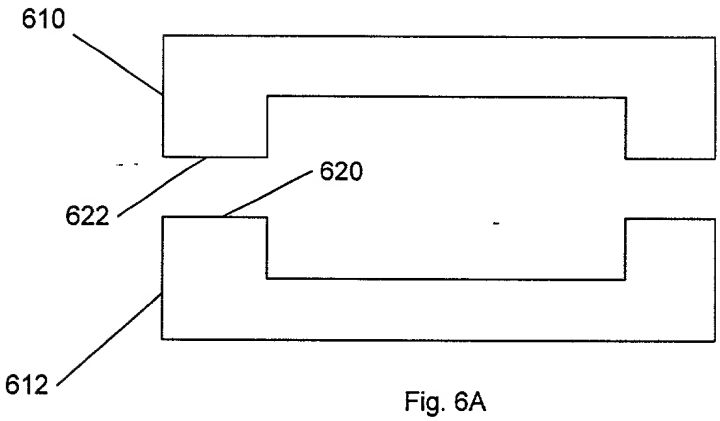

Fig. 6A

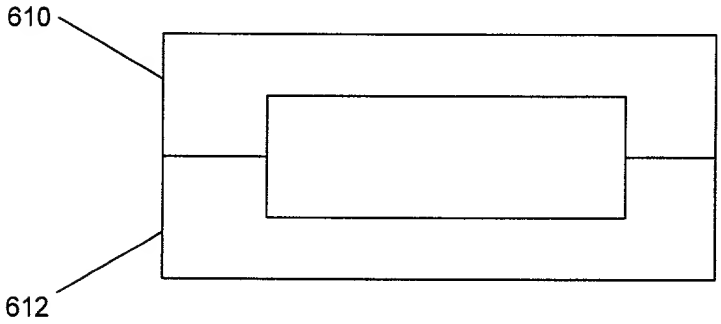

Fig. 6B

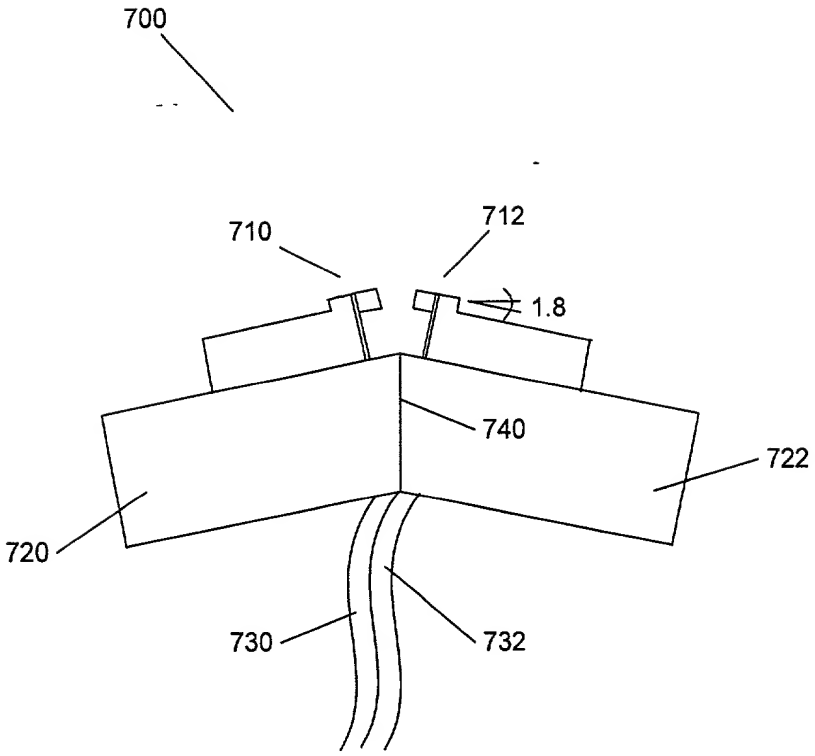

Fig. 7

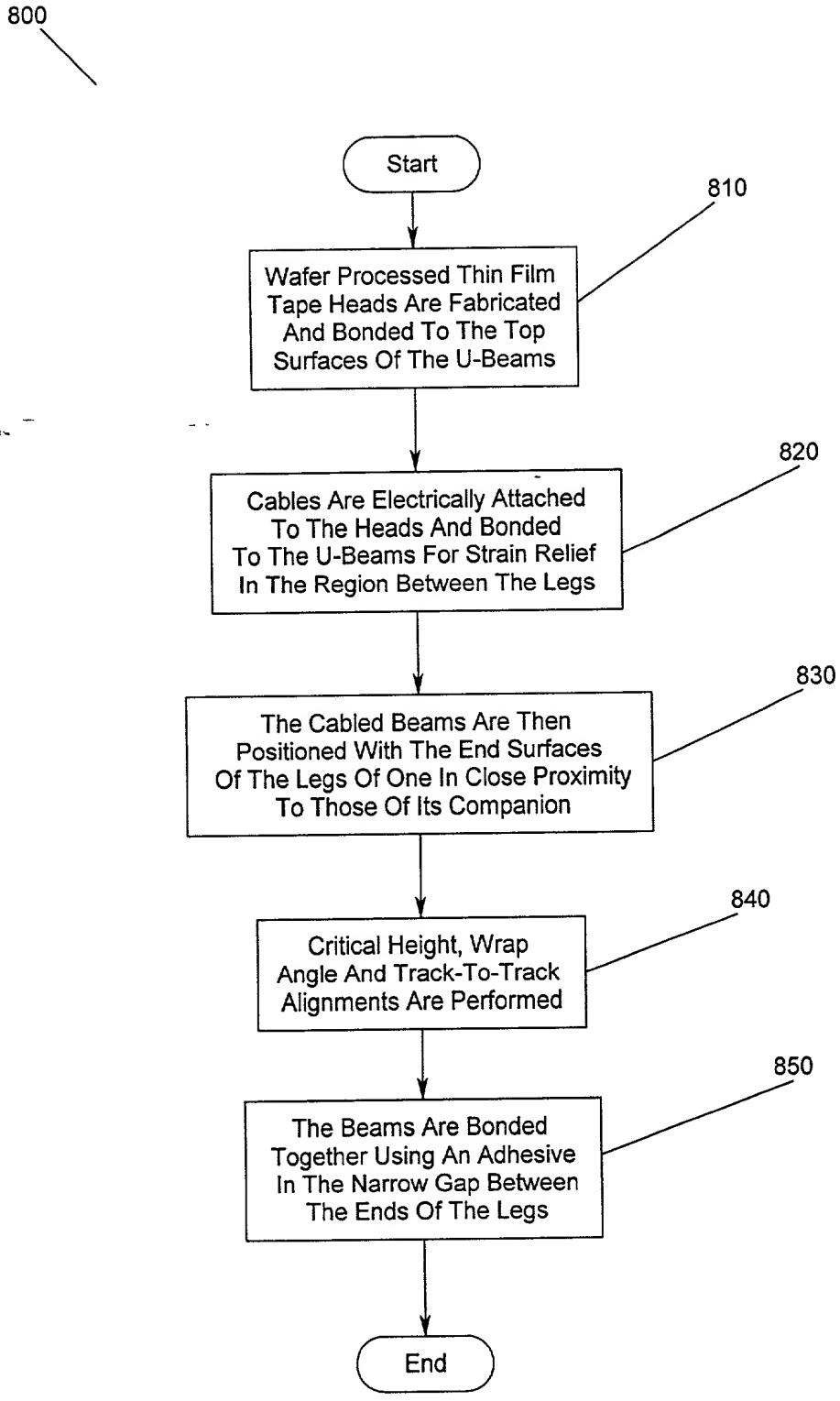
800
Start
810
Wafer Processed Thin Film Tape Heads Are Fabricated And Bonded To The Top Surfaces Of The U-Beams
820
Cables Are Electrically Attached To The Heads And Bonded To The U-Beams For Strain Relief In The Region Between The Legs
830
The Cabled Beams Are Then Positioned With The End Surfaces Of The Legs Of One In Close Proximity To Those Of Its Companion
840
Critical Height, Wrap Angle And Track-To-Track Alignments Are Performed
850
The Beams Are Bonded Together Using An Adhesive In The Narrow Gap Between The Ends Of The Legs
End

Fig. 8

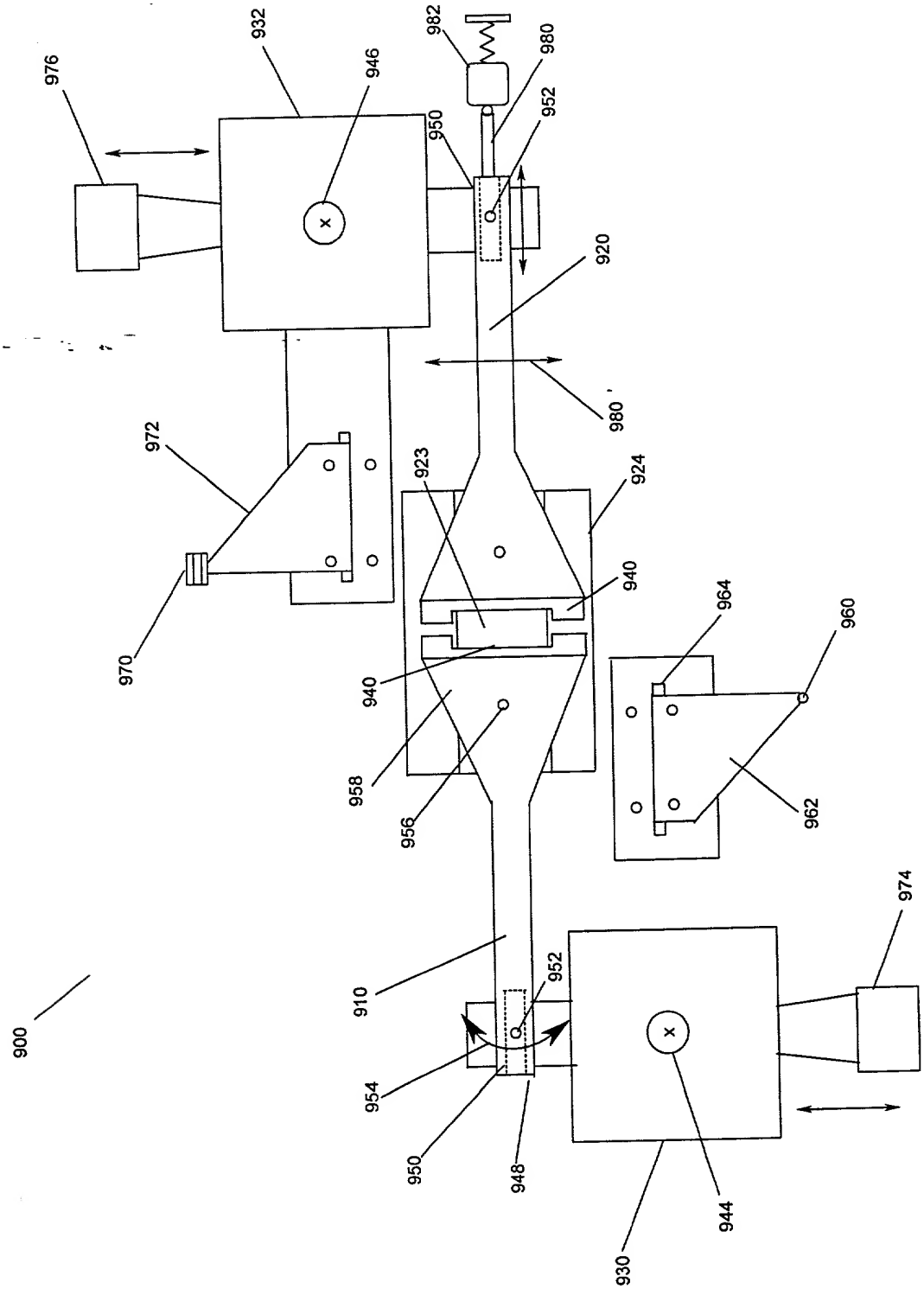
900
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Fig. 9

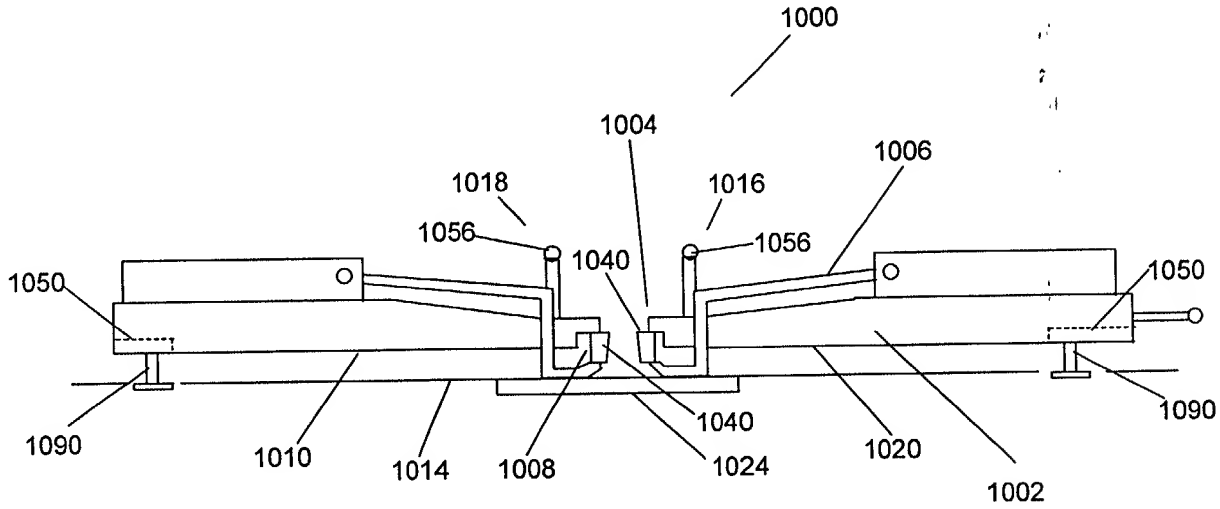

Fig. 10a

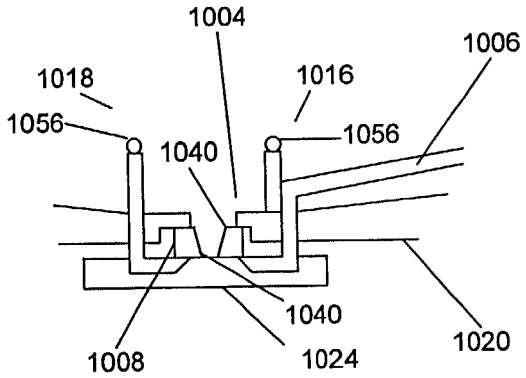

Fig. 10b

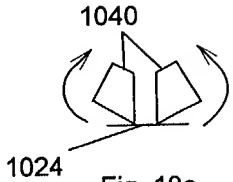

Fig. 10c

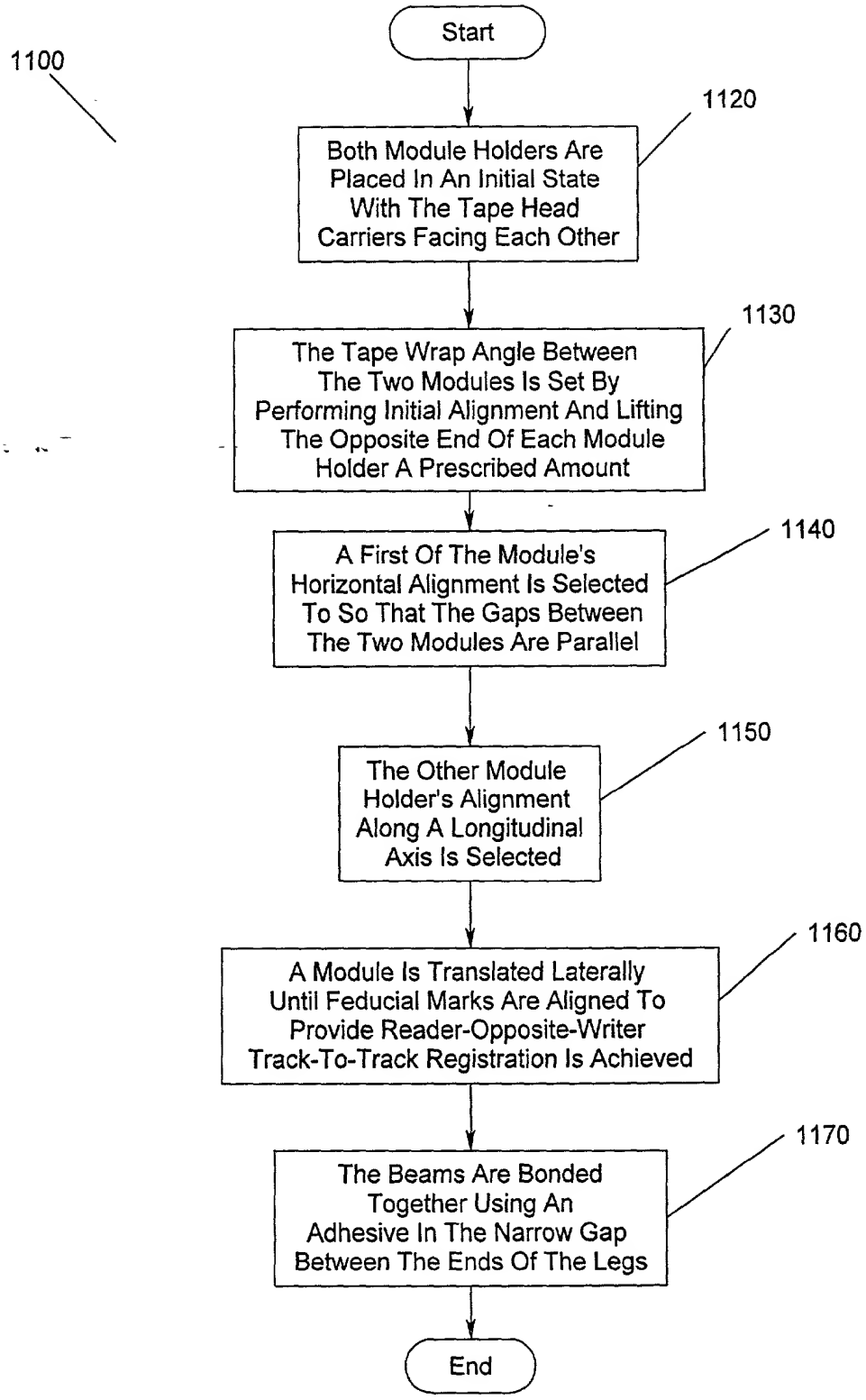
1100
Start
1120
Both Module Holders Are Placed In An Initial State With The Tape Head Carriers Facing Each Other
1130
The Tape Wrap Angle Between The Two Modules Is Set By Performing Initial Alignment And Lifting The Opposite End Of Each Module Holder A Prescribed Amount
1140
A First Of The Module's Horizontal Alignment Is Selected To So That The Gaps Between The Two Modules Are Parallel
1150
The Other Module Holder's Alignment Along A Longitudinal Axis Is Selected
1160
A Module Is Translated Laterally Until Feducial Marks Are Aligned To Provide Reader-Opposite-Writer Track-To-Track Registration Is Achieved
1170
The Beams Are Bonded Together Using An Adhesive In The Narrow Gap Between The Ends Of The Legs
End

Fig. 11

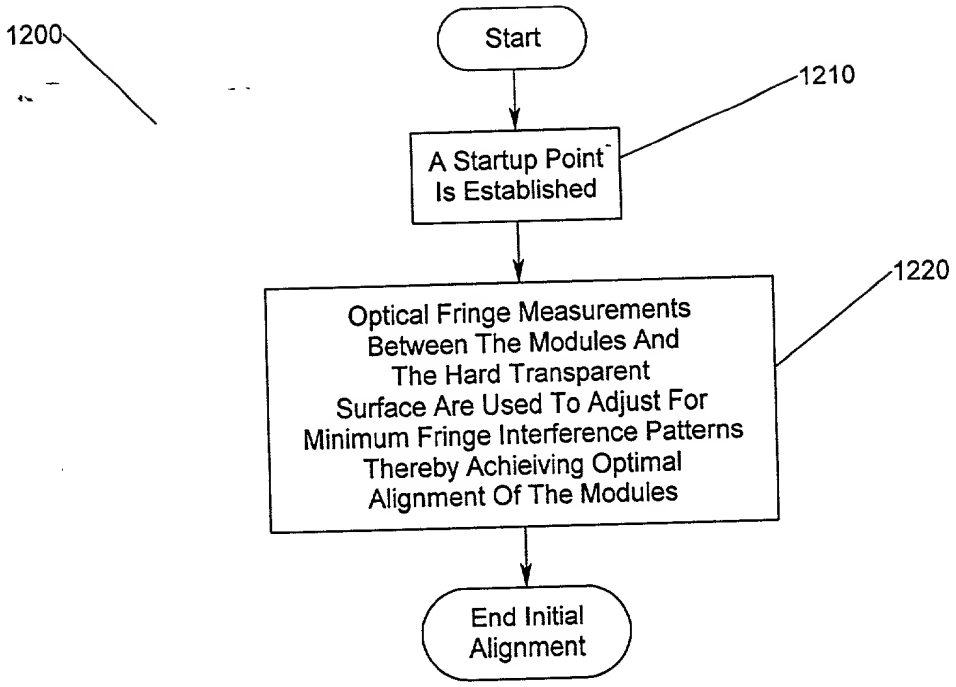
1200
Start
1210
A Startup Point Is Established
1220
Optical Fringe Measurements Between The Modules And The Hard Transparent Surface Are Used To Adjust For Minimum Fringe Interference Patterns Thereby Achieiving Optimal Alignment Of The Modules
End Initial Alignment

Fig. 12